

Volume 2, Issue 3
August 2004

Lucas County Engineer's Office
One Government Center
Suite 870
Toledo, Ohio 43604-2258
Phone: 419-213-4540
Fax: 419-213-4598

Email: engineer@co.lucas.oh.us
Web: <http://co.lucas.oh.us/>

Road Maintenance Garage
2504 Detroit Avenue
Maumee, Ohio 43537
Phone: 419-893-2232
Fax: 419-893-0111

POINTS OF SPECIAL INTEREST:

- The County Map will be on the web in the near future. A link to the map will be available through the County Engineer's Links section
- Financial Applications for the 2005 State Issue 2 funding round are due Oct. 12, 2004
- If you have any ideas for articles, please contact Scott Bernhard @ 419-213-4547. The deadline for the next edition is Dec. 3, 2004

"When a train goes through a tunnel and it gets dark, you don't throw away the ticket and jump off. You sit still and trust the engineer". - Corrie Ten Boom

INSIDE THIS ISSUE:

SUMMIT STREET BRIDGE REHAB. PROJECT PROGRESS	2
ROAD MAINTENANCE DEPT. NEWS	2
LED SIGNAL HEADS	3
TRIAD BUSINESS PARK	3
PEOPLE IN THE NEWS	4
ROAD MAINTENANCE DEPT. NEWS (CONT.)	5
ASSISTANCE TO TOWNSHIPS	5
OBSTRUCTION PROGRAM	6



The Earley Edition

*Keith G. Earley, P.E., P.S.
Lucas County Engineer*

Working Together with the Board of Lucas County Commissioners

There is a close working relationship between the Board of Lucas County Commissioners' Office and all elected officials and departments. That is a given with the structure of County Government in the State of Ohio.

That relationship has always been positive and supportive between the Board and the County Engineer. You would expect cooperation for highway, drainage, and bridge matters, but it actually extends beyond the normal into such areas as recreation, economic development, long range planning, County facilities, extension of waterlines, extension of sanitary sewers, and regional projects.

Some recent examples of inter-agency cooperation are the assistance of the Engineer's Office with:

- Design and construction for the Wabash Cannonball Trail;
- Grant funding for road and streetscape improvements adjacent to the Mud Hens Stadium;
- Input on several Township master plans;
- Counsel on zoning and planning matters before the Plan Commission;
- The Lucas County Recreation Center and Fairgrounds;
- Railroad crossing repair in Westwinds Industrial Park;
- Culvert replacement and ADA ramps for the Wabash Cannonball Trail;
- Project management, design, and grant funding for the Triad Business Park where the new Dana Research and Technology Building is located;
- Construction assistance for the Kroger complex in Sylvania Township;
- The Shops at Fallen Timbers in Maumee;
- Joint efforts to initiate and preserve the Right of Way for the upgrade of the Salisbury-Dussel interchange along with the City of Maumee, ODOT, and the Port Authority;
- Coordination of water and sanitary sewer construction in connection with road projects to avoid a second interruption of traffic for Sylvania Avenue, McCord Road, and Reno Beach;
- Design changes for the Summit Street Bridge with the City of Toledo and Point Place Business Association;
- Secondary drive access on Sylvania-Metamora Road for Centennial Terrace; and
- Joint efforts to develop a scenario for the funding of the Jerome Road extension between Monclova Road and US-20A for the City of Toledo.

In the area of storm water management, the Engineer's Office is staffing the E.P.A. Phase 2 regulations for the Board, and is also staffing the FEMA floodway mapping for Building Regulations. We also provide staff for the State Issue 2 Program and the Natural Resources Assistance Council Open Space Grant Program.

For new manufacturing job creation and job retention, the Engineer's Office manages the Highway Enterprise Fund, which is a joint Board, Engineer, and Port Authority fund. The program has assisted the City of Oregon with road improvements for the BP Oil Refinery and the City of Toledo with road and bridge improvements for the new Jeep plant.

The support of the Board and our excellent long-term relationship with their Staff is truly appreciated. The Engineer's Office pledges to continue these cooperative efforts, which better serve the public.

SUMMIT STREET BRIDGE REHABILITATION PROJECT PROGRESS

BRYAN ZIENTA



Bridge Abutment



Bridge Beams



Bridge Piers

Lucas County and the City of Toledo entered into a Joint Cooperation Agreement to improve the Summit Street Bridge over the Ottawa River. Funding for this project will come from the Federal Highway Administration, the Ohio Public Works Commission, the City of Toledo, and the Lucas County Road and Bridge Fund. The low bid was \$3,031,234.47 by Miller Brothers Construction of Archbold, Ohio.

The project involves the removal of the existing superstructure and abutments, modification of the existing piers, and significant roadway improvements. Upon completion, the bridge will accommodate future estimated vehicular traffic of 17,200 vehicles per day,

space for bicyclists, side-walks for pedestrian traffic, additional vertical clearance, and will include navigational lighting for boaters, decorative highway lighting, and an improved roadway approach. Decorative pedestrian railing and lighting, which have a nautical motif, has been selected to enhance the appearance of the bridge.

The rehabilitated Summit Street Bridge will have a length of 418 feet. The new high performance concrete deck will be on steel beams made from weathering steel which will have a rustic appearance after a few years. The decorative pedestrian rails, abutments, piers, and deck fascia will be painted to match the rustic appearance of the steel beams.

The Contractor began construction on June 14, 2004 and completion is scheduled for the late fall of 2005. The long construction schedule is due to poor soil conditions and the desire to maintain traffic on the bridge. The project will utilize part width construction and one lane of traffic will be maintained in each direction for the duration of the project. The completed bridge will have 2 lanes of traffic in each direction.



View of Bridge from west

ROAD MAINTENANCE DEPARTMENT NEWS

BOB MYERS

This construction season, a schedule was developed for the Road Maintenance Department for the construction projects of more than 1 week in duration. Some of the work is seasonal such as traffic counters, mowing, long line painting, hand painting, sign work, and drainage repair. Some of the work was grouped until there was a week's worth of work, such as forestry (non-storm) and miscellaneous roadway inspection follow-up items.

The number one goal of the summer operation is the seasonal work, along with paving, guardrail repair, and storm sewer construction. After manpower for these operations were filled, then other work, such as spot berm, debris pickup, cold patch, sewer cleaning, extra sign trucks, manufacturing of catch basin tops and bottoms, and minor clean-up

was filled in.

Regardless of the project size, the work for others, such as the cooperative projects with Townships and the Board of Lucas County Commissioners, were earmarked for follow-up.

New operations went very well this year, and these operations were Hot Paint application, ADA ramps, and berm regrading using the newly purchased "Claw".

It appears that the new scheduling system is working pretty well and the cut out paving operation has shown steady output improvement. The second year of emphasis on guardrail work is going well, however, manpower was not available every week. At the present time, the Road Maintenance Department has at least 10 weeks of drainage and culvert work ahead, plus a possible bridge repair project along with normal fall work.

Fall is the peak season for the Road Maintenance Department and several of our projects are being delayed so that the berm and shoulder follow-up, winter preparations, and the painting operations can be completed. No matter how much we plan ahead, there is always the unexpected, such as the sewer collapse at Elliston and Veler Roads, storm damage, and an extra mowing this year. Needless to say, we have plenty of work through the winter and for next spring.



See Pg. 5 for continuation

TRAFFIC OPERATIONS

RON MYERS

CRASH SUMMARY FOR 1999-2001

The Traffic and Planning Department prepares a traffic crash summary for intersections located within the unincorporated areas of the County that have four (4) or more accidents in a three (3) year period. The data contained in the summary is used to evaluate the need to initiate detailed intersection studies and/or improvements. The summary ranks the intersections according to the highest number of reported crashes in the latest year of available data. The crash summary will be updated to include 2002 and 2003 this fall, after the Ohio Department of Public Safety releases crash data for 2003.

The top ten (10) intersections of 2001 were as follows:

	Location	No. of Crashes	3 yr./Av.
1)	Airport (S.R. 2) & Holland-Sylvania	61	59
2)	Central (S.R. 20) & Wilford	52	26
3)	Airport (S.R. 2) & McCord	42	45
4)	Central (S.R. 20) & Holland-Sylvania	35	32
5)	Corey/Whiteford & Sylvania	32	34
6)	Central (S.R. 20) & McCord	28	46
7)	Hill & McCord	24	20
8)	Holland-Sylvania & Sylvania	23	26
9)	Monroe & Whiteford	23	23
10)	Bancroft & McCord	20	18

LED SIGNAL HEADS PAY OFF IN REDUCING ELECTRIC COSTS

Previously, we reported that the Traffic Operations Department was installing LED signal heads at all 28 Lucas County traffic signals. Signals with incandescent light bulbs consume 500% more power than LED signal heads, and LED signal heads can operate approximately 10 years without maintenance.

During Lucas County's first full year of operation, we have reduced our energy bills at each traffic signal from approximately \$130 per month to \$25 per month, on average.

Example of LED traffic signal head



TRIAD BUSINESS PARK

JOHN CRANDALL



In April of 2002, the Regional Growth Partnership and the Lucas County Economic Development Department contacted the Lucas County Engineer's Office (LCEO) regarding the cost to install subdivision improvements (roadway, drainage, water, and sanitary sewer) by petition on City of Toledo owned land in Monclova Township. Dana Corporation was considering three (3) separate locations for a new 170,000 SF Research and Technology Center, which would employ approximately 475 Engineers and white-collar workers. 200 of these jobs were from an existing facility in Springfield Township with the other 275 jobs being transferred from Fort Wayne, Indiana. Of the 3 sites, one was the Monclova Township site, with the others being in Wood County (Levis Park) and Monroe County, Michigan (Whiteford Township).

Dana chose a 30 Acre site on the City of Toledo land in Monclova Township, which became Lot 3 in Triad Business Park. Preliminary cost estimates by the LCEO for platting and infrastructure improvements on approximately 90 acres of the City of Toledo land (later to become Triad Business Park Plats 1 & 2) was \$3.6 million. The aggressive construction time schedule called for improvements to be completed within one year, with Dana constructing their new building concurrently with the subdivision improvements.

As an inducement to Dana, a state grant of \$700,000 for roadway improvements was obtained by the Regional Growth Partnership, and the Board of Lucas County Commissioners pledged \$235,000 toward water line and sanitary sewer improvements. In addition, the LCEO agreed to take a lead role to fund and make intersection improvements at Briarfield Blvd./US-20A and at Briarfield Blvd./Salisbury Rd.

All views and hearings were conducted, and final ap-

proval by the Board of Lucas County Commissioners was obtained in October of 2003. In the meantime, preliminary design was started by Feller, Finch & Associates, after selection through the County Consultant Qualification process. While design was proceeding on the Plat 1 & 2 improvements, numerous off site drainage alignments were being studied, and a final decision on storm drainage was made just weeks prior to opening construction bids.

Concurrently, with the development of the Triad detailed construction plans by Feller, Finch and Associates, the LCEO engaged the engineering firm of Dansard, Grohnke, and Long to prepare a Traffic Impact Study and detailed plans for the Briarfield Blvd./US-20A Intersection. Another local firm, The Mannik Smith Group, was engaged to prepare detailed plans for the Briarfield Blvd./Salisbury Rd. Intersection.

Final costs for the assessment portion of Triad Business Park Plats 1 & 2 are currently being finalized, and are

estimated at approximately \$3.1 million. The difference in these costs from the original estimate of \$3.6 million is the result of close coordination between all involved parties, and an excellent bid received from Underground Utilities, Inc. of Monroeville, Ohio.

Special thanks to the Road Maintenance Department that assisted the City of Toledo with mowing of the site in the early stages for survey work, and for performing minor cleanups along with ditch cleaning of the outlet to Swan Creek. Doug Parrish and Mike Meyer of the LCEO were responsible for review of the design and construction plans in addition to getting O.D.O.T. approval of the Traffic Impact Study. Finally, thanks to the Construction Inspection Department for their oversight well ahead of the scheduled Dana move), and to Mark Drennen for coordinating the grant funds.



SUMMER HELP

Thanks to the summer help from the Road Maintenance and Survey Departments. These gentlemen are integral to our operations during the summer months when some of our full-time employees are on vacation. In addition to grounds keeping, weed trimming for the mowing operation, sign shop assistance, and surveying, these college students provide the important function of flagging traffic control for some of our projects. We thank them for their assistance and look forward to seeing many of them back again next year.



Pictured clockwise from back left are Allen Stewart, Joe Green, David Veres, Mike Justen, Mike Harris, Dustin Wehri, Mike Bruss, Justin Schutte, and Greg Wimberly

EMPLOYEE PROFILE

David Bettinger, Engineering Technician for the Roadway, Township, and Drainage Departments, has worked for the County Engineer since 1974 and plans to retire this year. He lives on Rhode Island Rd. in Holland and attended Devilbiss High School and the University of Toledo.

Dave was in the survey crew before he transferred to the Design Department as a CADD Technician. Dave's supervisor, Jeff Lohse, says "Dave is a very efficient, productive employee who is always willing to assist others, and can juggle work on multiple projects at the same time. Last year is typical as he worked on 39 different projects including those in other sections, and completing those assignments in a timely manner. His work ethic is key to the production level of our section, which will make him very difficult to replace when he retires."

Dave plans to continue fishing, bow hunting, boating, traveling, and motorcycling after retirement, and may start his own business. You might be surprised to know that Dave also drives a vintage Jeep in World War II battle re-enactments. You also may recall Dave's scene on the television news when he stayed and helped a fellow County Employee trapped in the elevator during the infamous blackout one year ago.

Dave enjoys Seafood and our many fine Mexican restaurants, and says the secret to life is "don't worry so much, and be happy with what you have. Enjoy life, because it may not come around a second time."

BABY NEWS

Tina Richey, Engineering Technician, CADD Specialist, gave birth to a girl, Hailey, on March 12, 2004. Congratulations Tina and Roger!

NEW GENERAL FOREMAN

Do you know the man in this picture? If not, his name is Ryan Belinske, and he is a 15 year veteran of the Road Maintenance Department. Ryan was recently promoted to the position of General Foreman. This promotion

represents the first step of the reorganization effort at the Road Maintenance Department.

Ryan is a graduate of Cardinal Stritch High School and a former football player at the University of Toledo. He is married and has 2 children. Please welcome Ryan as the newest member of the management staff.

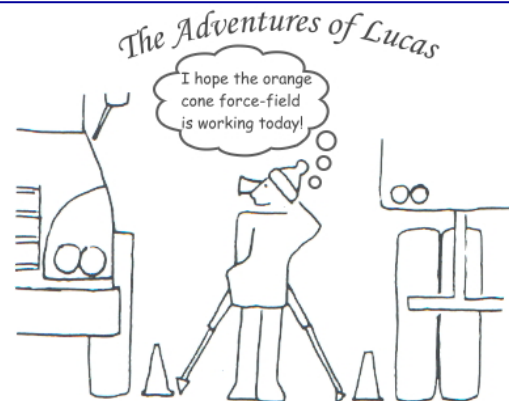
GOIN' DOWNTOWN

Mark Shiple, Permit Coordinator, has been transferred from the Road Maintenance Department to the Downtown Office. He will continue the annual roadway inspection for Road Maintenance and has taken over the Obstruction Survey Program.

**LUCAS COUNTY FAIR**

John Crandall answers questions.

Salt Brine truck on display.



ROAD MAINTENANCE DEPARTMENT NEWS (CONT.)

BOB MYERS

MOWING OPERATION

One of the major summer operations is right of way mowing and trimming. This year we planned on four cuts of 3 weeks each, along with 17 weeks of boom trimming. The minimum staffing is five for both operations and a maximum of eight, depending on the availability of personnel.

As with most operations, the goal is to keep the cost in line with private sector contractors, which presently do about 40% of the mowing. While our costs were about 15% higher last year, the difference has been cut in half over the past several years.

There are a number of good reasons to keep at least 50% of the mowing op-

eration with County crews, some of which are:

- The crews do more trimming around poles, guard-rail, hydrants, and signs;
- When an extra cut is needed, the department can respond immediately;
- County crews report daily on damaged catch basins, manhole tops, sign maintenance and washouts. So, for each extra full cut, we get another roadway safety check; and
- Complaints can be immediately addressed.

Due to above average rainfall this season, the time for mowing has been extended with one extended cut so far. This flexibility to address seasonal needs is another good example of why the Department continues this operation.



Mowing crew at work in Jerusalem Township

ASSISTANCE TO TOWNSHIPS

JEFF LOHSE

The County Engineer's Office provides general supervision, direction, engineering, and survey services to the Township Trustees for infrastructure maintenance on the Township Road System. In Lucas County, we serve all eleven Townships in this capacity.

2004 has been a typical year for the preparation of plans, bid documents, and providing construction inspection for township road improvement projects. To date, we have sold nine projects, which total \$1,843,521 in construction costs. Those projects include improvements to Elmer Drive, Scott Road, Fulton-Lucas Road, Harvest Ditch, Kilburn Road, and several existing subdivision plats in Monclova and Washington Townships. Since 1993, we have completed, bid, and constructed 169 Township improvement projects totaling over \$19,081,000 in construction costs. In addition to the

contract projects, we prepare four or five plans on average per year for force account work by Township forces.

Maximizing all available funding sources is essential when planning and constructing these improvements. One of the Townships sources of funding is grants and loans from the Ohio Public Works Commission. Our office prepares applications for various improvements on the Township System at the request of the Trustees. Since the beginning of the program in 1988, our office has prepared over 140 applications of which 68 have received funding. The total funding award for those 68 projects is over \$15,600,000. Another source of funding to the Townships is the Co-op program carried in the Engineers annual budget, which provides construction dollars to various paving and drainage projects.

In addition to the previously mentioned items, over

the past five years our office has completed 32 traffic studies, and 2-pavement management system studies on the Township system, and has issued over 1100 permits for work in Township right of way on behalf of the Trustees.

Yearly, we complete numerous joint Township/County projects involving signing, striping, storm sewer, culvert, and paving improvements. Additionally, our staff reviews and provides the construction inspection of new subdivision plats. There were 79 subdivision plats started from 2000 to 2003 and this year we expect approximately 30 more. New site plan reviews and construction inspection within the Township right of ways is also performed by our office.

Cooperation with material purchases, assisting with complaints, help with equipment and labor for routine maintenance items, are also ways in which we strive to maintain a good working rela-

tionship with all of the Townships. If you have any questions regarding Township roadways or projects, please contact Jeff Lohse, Chief Design Engineer, at 419-213-4540.



Washington Twp. - Bridgeview Drive and Point Pleasant Way



Sylvania Twp. - Elmer Drive Improvement

OBSTRUCTION PROGRAM

MARK SHIPLE
KYLE WARNER

The Lucas County Engineer's Obstruction Program was developed in 1999 after a roadway inspection found many impediments within the right of way. These impediments or obstructions included special interest signs and advertisements, however, the main concern was the improper placement of landscape rocks and non-standard mailboxes. In an effort to provide the safest possible highway system for the traveling public of Lucas County, the Obstruction Program was launched, with Monclova Road as the pilot roadway.

The focus of the program was not only to remove dangerous obstacles within the clear zone, but also to inform property owners of the rules and regulations that govern roadside mailboxes. Many people may be unaware that mailboxes must be constructed entirely of plastic or lightweight galvanized steel attached to a support unit, which would not separate upon impact. The support unit must be a wooden post no larger than a 4 x 4 or a metal post no greater than 2 inches in diameter, and the mailbox support cannot be set in concrete.

This year all County roads in Jerusalem Township and all County roads south of Airport Highway (S.R. 2) have been surveyed for roadway obstructions. To date, 208 letters detailing removal of unauthorized items in the right of way have been sent out, along with a pamphlet outlining the regulations for mailbox construction and installation. Once the Obstruction Program is complete, homeowners will be responsible for correction or elimination of obstructions they have created. Road Maintenance crews will have the ongoing task of identifying obstructions, the elimination of which will make the roads much safer.



Examples of non-standard mailboxes

Lucas County Engineer's Office

Keith G. Earley, P.E., P.S.

Lucas County Engineer

One Government Center
Suite 870
Toledo, Ohio 43604-2258
Phone: 419-213-4540
Fax: 419-213-4598
Email: engineer@co.lucas.oh.us

EDITING STAFF:

SCOTT BERNHARD

BRIAN S. MILLER

MISSY DIXON - MAIN OFFICE

PAUL ELINGER - ROAD MAINTENANCE

*Engineering safety today
for a better tomorrow.*



WE'RE ON THE WEB @ [HTTP://CO.LUCAS.OH.US/ENGINEER](http://co.lucas.oh.us/engineer)